# This Page Is Inserted by IFW Operations and is not a part of the Official Record

# BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES.
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

# IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

282

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RADE Te Application of:

REID, J.

Attorney Docket No.: P21-US

Serial No.:

09/910,537

Group Art Unit:

2822

Filed:

07/20/2001

Examiner:

DUONG, KHANH B.

For:

TRANSITION METAL DIELECTRIC ALLOY MATERIALS FOR MEMS

#### INFORMATION DISCLOSURE STATEMENT PURSUANT TO 37 CFR 1.97(b)

Assistant Commissioner of Patents Alexandria, VA 22313-1460

September 23,

Sir:

The attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached Forms PTO/SB/08A and B. Copies of the references are enclosed herewith. The fee in the amount of \$180.00 required in connection with the filing of this Information Disclosure Statement is also enclosed herewith.

The Examiner's attention is also directed to co-pending patent applications:

- MEMS Device Made of Transition Metal-Dielectric Oxide Materials, Reid, filed a) 07/17/2002, Serial No. 10/198,389, Attorney Docket No. P61-US; and
- a) MEMS with Flexible Portions of Novel Materials, Reid, filed 08/21/2002, Serial No. 10/176,478, Attorney Docket No. 54-US.

The above information is presented so that the Patent and Trademark Office can determine any materiality thereof to the claimed invention. It is respectfully requested that the information be considered during the prosecution of this application and that the cited documents be listed on the front page of any patent issuing from this application.

The Patent Office is authorized to charge our Deposit Account No. 501516 for any additional fees it deems to be required to effect consideration of this statement.

Respectfully submitted,

Gregory R. Muir
Attorney for Applicant

Registration No. 35,293

Attorney Docket No. P21-US

REFLECTIVITY, INC. 350 Potrero Avenue Sunnyvale, CA 94085

Tel:(408) 737-8100 x136 Fax:(408) 737-8153 GRM/lb

PTO/SB/17 (01-03) PTO/SB/17 (01-03)
PTO/SB/17 (01-03)
Approved for use through 04/30/2003. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
U.S. DEPARTMENT OF U.S. DEPARTMENT O Complete if Known FEE TRANSMITTAL 09/910,537 Application Number 7/20/2001 Filing Date for FY 2003 REID First Named Inventor Effective 01/01/2003. Patent fees are subject to annual revision. DUONG, KHANH B. **Examiner Name** Applicant claims small entity status. See 37 CFR 1.27 2822 Art Unit P21-US (\$) 180.00Attorney Docket No. TOTAL AMOUNT OF PAYMENT FEE CALCULATION (continued) METHOD OF PAYMENT (check all that apply) 3. ADDITIONAL FEES Money Order None Other ✔ Check Credit card Large Entity | Small Entity **Fee Description** Fee Paid Deposit Account: ee: Fee Code Code (\$) 65 Surcharge - late filing fee or oath Deposit 501516 2051 1051 130 Account Number Surcharge - late provisional filing fee or 2052 25 50 1052 cover sheet Deposit Reflectivity, Inc. 130 Non-English specification Account 1053 1053 130 1812 2,520 For filing a request for ex parte reexamination Name The Commissioner is authorized to: (check all that apply) 1812 2.520 Credit any overpayments 920\* Requesting publication of SIR prior to Charge fee(s) indicated below 920 1804 1804 Charge any additional fee(s) during the pendency of this application Requesting publication of SIR after Examiner action Charge fee(s) indicated below, except for the filing fee 1805 1,840\* 1805 1.840 Extension for reply within first month to the above-identified deposit account. 55 2251 1251 110 FEE CALCULATION Extension for reply within second month 2252 410 1252 465 Extension for reply within third month 1. BASIC FILING FEE 2253 1253 930 725 Extension for reply within fourth month Large Entity Small Entity Fee Paid 2254 1,450 1254 1 1 Fee Description 985 Extension for reply within fifth month Fee Fee Code (\$) 2255 1,970 1255 Utility filing fee 2001 375 1001 750 160 Notice of Appeal 320 2401 1401 Design filing fee 160 Filing a brief in support of an appeal 2002 165 1002 330 2402 1402 320 Plant filing fee 2003 260 140 Request for oral hearing 1003 520 2403 1403 280 Reissue filing fee 1,510 Petition to institute a public use proceeding 1004 750 2004 375 1451 1451 1,510 Provisional filing fee 55 Petition to revive - unavoidable 2005 80 1005 160 1452 2452 110 SUBTOTAL (1) (\$) 650 Petition to revive - unintentional 2453 1453 1,300 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE eso. Utility issue fee for reissue

2 EXTRA C	LAIM FEES	FOR UTILITY AND REISSUE	1501 1	,300	2501		Utility issue fee (or reissue)	
Z. LATINA O		Fee from Fee Paid	1502	470	2502	235	Design issue fee	<b> </b>
T to l Oleima	-20**		1503	630	2503	315	Plant issue fee	
Total Claims Independent	-3**		1460	130	1460	130	Petitions to the Commissioner	
Claims Multiple Deper			1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	180.00
•			1806	180	1806	180	Submission of Information Disclosure Stmt	100.00
Large Entity Fee Fee	Small Entity Fee Fee Code (\$)	Fee Description	8021	40	8021	40	Recording each patent assignment per property (times number of properties)	·
Code (\$) 1202 18	2202 9	Claims in excess of 20	1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))	
1201 84	2201 42 2203 140	Independent claims in excess of 3  Multiple dependent claim, if not paid	1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))	
1203 280		** Reissue independent claims					Evamination (RCF)	1
1204 84	2204 42	over original patent	1801	750	2801	375	a demanded to the second to th	
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent	1802	900	,	900	of a design application	
		fee (s			(a) (d) 400	00		
	*Red	uced by	y Basic F	iling F	Fee Paid SUBTOTAL (3) (\$) 180	.00		

WARNING: Information on this form may become public. Credit card information should not be included op this form. Provide credit card information and authorization on PTO-2038.

Registration No.

35,293

(Complete (if applicable) Telephone 408-737-8100

Date

09/23/03

\*or number previously paid, if greater; For Reissues, see above

Gregory, R. Muir

SUBMITTED BY

Name (Print/Type)

Signature

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

PTO/SB/92 (08-03) Approved for use through 07/31/2006. OMB 0561-0031
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

TC 2800 HAIL ROOM

work Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

### Certificate of Mailing under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

> Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

on September 23, 2003 Date

Linda Bolton

Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Information Disclosure Transmittal Statement - 2 pages

SB/08A - 1 page /SB/08B - 1 page

Copies of References - 3

SB/17 - Fee Transmittal - 1 page

Check - \$180.00 and Return Receipt Postcard

This collection of information is required by 37 CFR 1.8. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.8 minutes to complete, including process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.8 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the gathering, preparing, and submitting the complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and the USPTO. Time will vary depending upon the individual case. Any comments of the USPTO. Time will vary depending upon the individual case. Any comments of the USPTO. Time will vary depending upon the individual case. Any comments of the USPTO. Time will vary depending upon the individual case. Any comments of the USPTO. Time will vary depending upon the individual case.

PTO/SB/08A (08-03)

P10/SB/08A (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Derwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Saper Stitute for form 1449/PTO

#### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Application Number 09/910,537 07/20/2001 Filing Date First Named Inventor REID 2822 Art Unit DUONG, KHANH B. Examiner Name P21-US Attorney Docket Number

Sheet	1	of 2			
			U.S. PATENT	DOCUMENTS	Pages, Columns, Lines, Where
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
.,		Number-Kind Code <sup>2 (if known)</sup>		HAWKINS, et al	
	D1	<sup>US-</sup> 6,238,581B1	05/29/2001	HAVKINS, et al	
		US-			
		US-			
	$t^-$	US-			<del>                                     </del>
		US-			
	†	US-			<del> </del>
	+	US-			+
		US-			
	+-	US-			
	+	US-			
		US-			
	+-	US-		<u> </u>	
	+	US-			
<b> </b>	+	US-			
<del> </del>	+-	US-			
	+-	US-			
		US-			
<b> </b>	+-	US-			
	+-	US-			
í	1				

	لـــــــا		PATENT DOCU	MENTS		=
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3 -</sup> Number <sup>4 -</sup> Kind Code <sup>5</sup> (if known)				H
						H
						┝┵
						<u></u>

1			
		Date	
Examiner		Considered	
Signature	Lead whether or not citation is in conformance with MPEP 609. Draw	w line through	citation if not in conformance and not

Examiner
Signature

Signature

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation of citation in not in conformance and not

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation of particular in the conformance and not citation is in conformance with MPEP 609. Draw line through citation is in conformance and not citation in the citat \*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. (Nicolar of the patent document by Lapanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. (Nicolar of the patent document by Lapanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. (National of the year of the reign of the Emperor must precede the serial number of the patent document.) The collection of information is required by 37 CEP 1.97 and 1.98. The information is required to obtain a baseful to be patent as the patent of the patent of the patent document. (National of the patent document in the patent document in the patent document in the patent document in the patent document.) The patent document is required by 37 CEP 1.97 and 1.98. The information is required to obtain a patent document in the patent document in the patent document in the patent document.)

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the This collection of information is required by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, use including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments including gathering, preparing, and submitting the completed application for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent on the amount of time you require to complete this form and/or SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450.

TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

	2 5 200	3	•	t of 1995, no persons an	and a second to a collection	PTO/SB/08B (08-03 Approved for use through 07/31/2006. OMB 0651-003 and Trademark Office; U.S. DEPARTMENT OF COMMERCI of information unless it contains a valid OMB control number Complete if Known
729		for form 1449/PTO	donom		Application Number	Complete if Known 09/910,537
١	INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	07/20/2001
					First Named Inventor	REID
	317	/   EINIEIVI -			Art Unit	2822
		(Use as many sho	eets as n	ecessary)	Examiner Name	DUONG, KHANH B.
	Sheet	12	of	2	Attorney Docket Number	P21-US

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, symposium, catalog, etc.), date, page(s), volume-issue the item (book, magazine, journal, symposium, catalog, etc.), date, page(s), date,	T <sup>2</sup>
	D2	MAEX, K. et al, ED, PROPERTIES OF METAL SILICIDES, pp. 97-102, Published by Inspec, London, England, 1992	
	D3	ROGL, P, et al, PHASE DIAGRAMS OF TERNARY BORON NITRIDE AND SILICON NITRIDE SYSTEMS, pp. 1-2, 6-7, 18-19, 32-37, 76-78, 85-87, 97-100, 103-106, 113-120, 125-130, 133-134, 144-157, 169-171, 175-177, 180-186, 195-199, 205-209, 215-218' Published by ASM International, Materials Park, Ohio, 1992	
		215-218 Published by ASIVI International, material	-
			<u> </u>
	-		

		Date	
Examiner		Considered	·
Signature	with MPEP 60		itation if not in conformance and not

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Considered include copy of this form with next communication to applicant. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO This collection of information is required by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including to process) an application, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and amount of time you require to complete this form and/or suggestions for reducing this burden, shoul